



A Division of Thiessen Products, Inc.

## INSTRUCTION SHEET FOR TOOL #772

### PISTON OIL JET TESTER

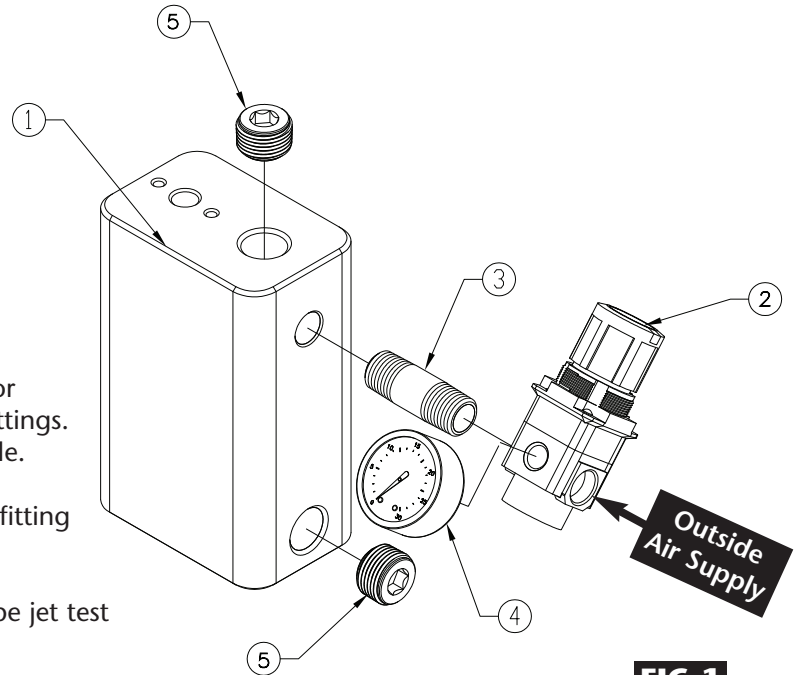
This piston jet tester takes all the guess work out of the installation of new or used piston jets in a motor. This is a great way to keep from putting in a weak, gummed up or defective piston jet that will cause piston damage. Testing can be done with air or oil.

#### PARTS AVAILABLE SEPARATELY

No.	Qty.	Description	Part No.
1	1	MAIN BODY	772- 1
2	1	REGULATOR W/2 PLUGS	772- 2
3	1	PIPE NIPPLE	772- 3
4	1	0-30 PSI GAUGE	772- 4
5	2	ALLEN PLUG	772- 6
6	1	INSTRUCTION SHEET	772-IS

Recommended tools and supplies to assemble:

- 1 - Qt. H-D, 20-50 or equivalent if doing a wet test.
- 1 - 1/4" NPT Air coupler nipple fitting to fit regulator
- 1 - Teflon thread tape, or liquid thread sealant for fittings.
- 1 - Channel Lock Pliers for installing short pipe nipple.
- 1 - 5/16" Allen Wrench for installing plug fittings
- 1 - 3/16" Allen Wrench for installing regulator plug fitting
- 1 - 7/16 open end wrench for installing gauge
- 1 - T-20 Torx for mounting jet screws
- 1 - General purpose grease for performing an air type jet test
- 1 - Tin cake pan or equivalent to set tool in.
- 1 - Pair of Safety Glasses or Face Shield
- 1 - Solvent tank for flushing out main body
- 1 - H-D Service Manual 1999 to present Twin Cam for piston jet reference.
- 1 - Quick connect air hose fitting with a 1/4" NPT to supply compressed air to tool.



**FIG. 1**

Before using this tool read the complete instructions, and refer to Engine section under the "Bottom End Oiling" section of your H-D Service Manual, to become more informed on piston jet oiling.

**ALWAYS WEAR SAFETY GLASSES OR OTHER FACE AND EYE PROTECTION SUCH AS FULL FACE SHIELD. JIMS® IS NOT RESPONSIBLE FOR DAMAGE, INJURY, OR YOUR WORK. JIMS® IS NOT RESPONSIBLE FOR THE QUALITY AND SAFETY OF YOUR WORK.**

#### ASSEMBLY OF TOOL:

1. Always wear your safety glasses, or face shield. Prep the main body No.773-1 by flushing solvent through the larger threaded holes and then use compressed air to blow dry inside and outside.
2. Use Teflon tape or thread sealant on the threads of pipe nipple No.772-4 and both of Allen plugs No.772-6. Install No. 772-4 pipe into the upper side of main body No.772-1 using Channel Lock pliers on the smooth surface of the pipe.
3. Note that on bottom of regulator arrow must point towards Main body No. 722-1. Thread the Regulator Valve No.772-2 onto the end of pipe nipple No.772-3. **See Fig 1 & 2.**
4. Install gauge No. 722-4 to the regulator using thread sealant or Teflon tape. **See Fig 1.**
5. Install 1/8" NPT Allen plug provided into the regulator on the opposite side the gauge.

*Performance Parts For Harley-Davidson Motorcycles*



A Division of Thiessen Products, Inc.

# INSTRUCTION SHEET FOR TOOL #772

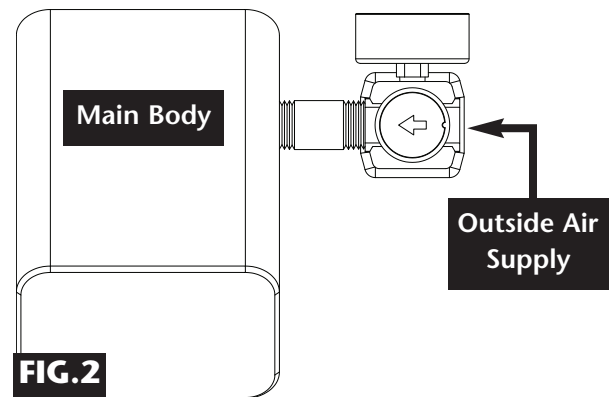
6. Install your 1/4" NPT quick connect nipple fitting to the opposite side of the pipe nipple on the regulator, using Teflon tape or thread sealant. **See Fig. 3.**
  7. Install one No.772-6 Allen plug into the lower side of No.772-1 main body **See Fig 1**
- Note:** *If you want to do your jet testing using just air then install the other plug No.772-6 into the top of the main body No.772-1. If you are doing the jet testing using oil then fill the Main body No. 772-1 with H-D 20-50 motor oil and install plug No.772-6. **See Fig. 1.***

### CLEANING PISTON OILING JET:

If you're using a new or used oiling jet you should soak them in solvent and then air off before testing. It is not advisable to apply air directly to oil passage of the oiling jet because you can easily damage or distort the check ball spring.

### PISTON JET TESTING:

1. Use the H-D jet mounting screws No.68042-99 to mount the jet you're testing to the top of the body as shown. **See Fig. 4**
2. Next close the regulator valve by lifting up on the knob and turn clockwise until tight.
3. Connect your air supply source connector coupling to the nipple you have installed on the regulator valve.



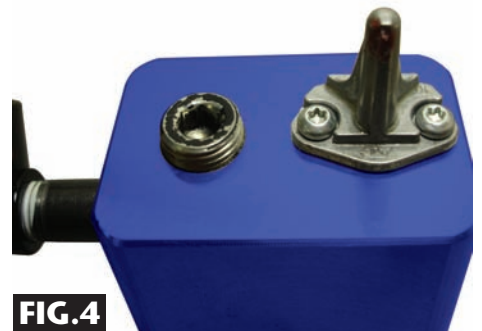
### PERFORMING TEST USING AIR:

1. Lightly coat the nozzle area with general purpose grease. This is performed so you can see the grease disperse when the oiling jet opens. **See Fig 5.**
2. Turn regulator knob slowly to open the valve by turning counter clock wise and watching the gauge at the same time. If this is a good jet valve it should open at 12-15 PSI. You will also notice the grease sprays away when jet opens.



### PERFORMING TEST USING OIL:

1. Place the main tool body assembly inside a cake pan or equivalent to help contain the oil from jet spray.
  2. Pull up on regulator knob and slowly open the valve and watch the gauge at the same time. If this is a good jet valve it should open at 12-15 PSI. You should also notice the oil spray as the jet opens at this pressure range.
- If you have found a piston oiling jet that does not fall within the 12-15 PSI then do a second test. Discard if they do not fall within this range after your second test.



*Performance Parts For Harley-Davidson Motorcycles*